Reflections on the GRIM Social Ecological Systems Spring School, 2018

By Dalal Hanna

As an ecologist, I have spent a lot of my academic training learning about "nature". What are the all the body parts of mammals, fish, birds and what does that teach us about evolution? What is the difference between a lake and a river? Why does that tree have green leaves? Learning all this information about the environment has laid the important foundations necessary for me to work as a scientist, and more specifically an ecologist, spending most of my days trying to uncover more about the world that surrounds us and how it works. However, there is one very important component of "nature" that wasn't always at the forefront of my academic training, and that's us, humans. We are living in the anthropocene, the era of humans, where we have influence on almost every square inch of Earth, and it thus crucial that ecologists -the people who do research about the environment- also start thinking about the human side of the equation so they know when it needs to be considered in their research.

From my perspective, this is what the Spring School on Social Ecological Systems was about. Over eight days, 13 students from around the world gathered at the Garden Route Interface Meeting (GRIM) and then in an intensive graduate course at the Nelson Mandela Metropolitan University, in South Africa, to learn about social ecological systems research. That is, research that considers both the social and ecological components of the environment (i.e. both "nature" *and* humans), allowing us to address pressing questions concerning sustainable and equitable land use management. We spent three days at GRIM hearing from other researchers about the work they've done drawing connections between people and their surroundings to better inform collective understanding and management.

Then, the graduate course began. We spent a day hearing from a group of experts about their experiences managing protected areas and the delicate balance between people and all the rest required to successfully do so. We learnt about the methods being used by social ecological researchers around the world and resources we could consult to start our own journey as scientists keen on contributing to this important body of literature. We learnt about conceptual frameworks, and how they can be useful tools to guide the development of a study. We learnt about knowledge co-production and social learning, the trans-disciplinary process of working with diverse people to increase understanding of social ecological systems and inform more inclusive management. We dived into details about why this type of knowledge production and learning is crucial to make the needed transition toward more sustainable and equitable management of natural resources, and how to facilitate these processes.

Then, we hit the road. Moving from George, through Wilderness, passing over the Touws river, and all the way to Knysna, we went on a tour of the local social ecological systems, asking

ourselves about them, trying to uncover what methods we could use to do meaningful research within these complex systems. We spent the following days in groups of four or five, each assigned to a specific social ecological question relevant to the region. Together, we built from the elements explored during the theoretical part of the course and our experiences moving through these systems to outline methods for a social ecological research project that would allow an increased understanding of these systems. We brainstormed, asked questions, talked to people, and went through a learning journey which better equipped us to move through this world as ecologists that now think about both the ecological and social sides of the story, and how that must inform our research.